

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HONEYWELL INTERNATIONAL INC.
and HONEYWELL INTELLECTUAL
PROPERTIES INC.

Plaintiffs,

v.

HAMILTON SUNDSTRAND CORP.,

Defendant.

C.A. No. 99-309-GMS

**FINAL PRETRIAL ORDER
EXHIBIT 18**

HSC'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

Hamilton Sundstrand Corp. ("HSC") submits these Proposed Findings of Fact and Conclusions of Law. To the extent that any issue of law is deemed to be an issue of fact, it should be so considered, and to the extent that any issue of fact is deemed to be an issue of law it should be so considered. Moreover, HSC incorporates by reference all statements of fact and conclusions of law found in HSC's Trial Brief to the extent not explicitly set forth in this Proposed Findings of Fact and Conclusions of Law. HSC reserves the right to supplement these Proposed Findings of Fact and Conclusions of Law after the close of evidence.

FINDINGS OF FACT

I. The Parties

1. Honeywell International Inc. ("Honeywell") is a corporation organized and existing under the laws of Delaware with its principal place of business at 101 Columbia Road, Morristown, New Jersey. Honeywell is the successor-in-interest to a corporation known as

Allied Signal Inc., which was also a Delaware corporation headquartered in Morristown, New Jersey. (Stipulation of Uncontested Facts ¶1)

2. Honeywell Intellectual Properties Inc. is a corporation organized and existing under the laws of Arizona with its principal place of business at 960 W. Elliott Road, Suite 101, Tempe, Arizona. (Stipulation of Uncontested Facts ¶2)

3. Hamilton Sundstrand Corporation is a corporation organized and existing under the laws of Delaware with its principal place of business at One Hamilton Road, Windsor Locks, Connecticut. HSC's power systems business, which is responsible for its auxiliary power units, is based in San Diego, California. HSC is a wholly-owned subsidiary of United Technologies Corporation. (Stipulation of Uncontested Facts ¶3)

II. Procedural History

4. Honeywell filed this case in May 1999, alleging that the APS 3200 surge control system infringed certain claims of the '893 and '194 patents. (Complaint)

5. On December 6, 2000, HSC filed a pretrial motion for summary judgment that Honeywell could not assert the doctrine of equivalents as a result of prosecution history estoppel. (D.I. 175)

6. The Court denied HSC's motion for summary judgment of non-infringement. *Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.*, 2001 U.S. Dist. LEXIS 2155, *6 (D. Del. Jan. 8, 2001).

7. A jury trial was held on February 5-16, 2001. At the trial, Honeywell asserted infringement of three independent claims: claim 4 of the '194 patent and claims 8 and 19 of the '893 patent. Honeywell asserted that the APS 3200 infringed claim 4 both literally and under the

doctrine of equivalents. Honeywell asserted that the APS 3200 infringed claims 8 and 19 only under the doctrine of equivalents. (DX 354)

8. In a verdict form dated February 16, 2001, the jury found that the APS 3200 APU did not literally infringe any claims of the ‘194 or ‘893 patents, but infringed claim 4 of the ‘194 patent and claims 8 and 19 of the ‘893 patent under the doctrine of equivalents. (Stipulation of Uncontested Facts ¶9; DX 354)

9. On February 20, 2001, following the jury verdict, the Court entered judgment in Honeywell’s favor. (Statement of Uncontested Facts ¶9; DX 354)

10. Both Honeywell and HSC appealed portions of the jury verdict to the Federal Circuit. However, Honeywell did not appeal the jury’s finding that the APS 3200 did not literally infringe claim 4. *Honeywell Int’l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1136-38 (Fed. Cir. 2004) (“Honeywell concedes that the inlet guide vane limitation is not literally met by the accused device.”).

11. The Federal Circuit ruled *en banc* that Honeywell had presumptively surrendered all equivalents to the IGV limitation, and remanded the case for a determination of whether Honeywell could overcome the *Festo* presumption of surrender. *Honeywell*, 370 F.3d at 1144.

III. The Prosecution History Of The Patents-In-Suit

12. United States Patent No. 4,380,893, entitled “Compressor Bleed Air Control Apparatus and Method,” (the “‘893 patent”) issued on April 26, 1983. (Stipulation of Uncontested Facts ¶4; DX 335)

13. United States Patent No. 4,428,194, entitled “Compressor Bleed Air Control Apparatus and Methods,” (the “‘194 patent”) issued on January 31, 1984. (Stipulation of Uncontested Facts ¶5; DX 337)

14. All of the system and method claims contained in the '893 and '194 patents were originally contained in a single application, U.S. Patent Application 235,794 (the "'794 application"). As a prosecution formality, the system and method claims were split into two separate applications. The system claims remained in the '794 application and issued as the '893 patent. The method claims from the '794 application were re-filed in a divisional application, U.S. Patent Application No. 424,674 (the "'674 application"), which issued as the '194 patent. (DX 336; DX 338)

15. Original application claims 16 and 32 in the '794 application did not make any reference to inlet guide vane ("IGV") position. (DX 336 at HSB 401434, 439)

16. Original application claim 48 in the '674 application did not make any reference to IGV position. (DX 338 at HSB 401556)

17. In the first Office Action in each application, the Patent and Trademark Office ("PTO") Examiner rejected original application claims 16, 32 and 48 under 35 U.S.C. § 103 as obvious in light of the prior art. (DX 336 at HSB 401456-57; DX 338 at HSB 401566-67)

18. In the '794 application, original application claim 17 was dependent upon application claim 16, and original application claim 35 was dependent upon application claim 32. (DX 336 at HSB 401435-45) In the '674 application, original application claim 51 was dependent upon application claim 49, which was in turn dependent upon application claim 48. (DX 338 at HSB 401556-57)

19. The limitation added by each of these dependent claims 17, 35 and 51 required a specific use of IGV position in a surge control system. (DX 336 at HSB 401435-45; DX 338 at HSB 401556-57)

20. The Examiner stated that dependent claims 17, 35 and 51 would “be allowed if rewritten in independent form.” (DX 336 at HSB 401458; DX 338 at HSB 401567)

21. On October 25, 1982, in response to the Examiner’s office action, Honeywell amended application claims 17 and 35, rewriting them into independent form, canceling the original independent claims on which they previously depended and “effectively adding the inlet guide vane limitation to the claimed invention.” *Honeywell Int’l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1144 (Fed. Cir. 2004). (DX 336 at HSB 401466, 472)

22. On August 30, 1983, in response to the Examiner’s office action, Honeywell amended application claim 51, rewriting it into independent form, canceling the original independent claim on which it previously depended and “effectively adding the inlet guide vane limitation to the claimed invention.” *Honeywell*, 370 F.3d at 1141. (DX 338 at HSB 401573)

23. Accordingly, the relevant amendment date for the narrowing amendment of the ‘893 patent is October 25, 1982, and the relevant amendment date for the narrowing amendment of the ‘194 patent is August 30, 1983.

24. Honeywell did not provide any explanation to the Examiner’s office action as to why it amended the claims as it did or as to why it included the IGV limitation in the asserted claims. (DX 336 at HSB 401473-78; DX 338 at HSB 401574)

25. At the time of the rejections, Honeywell could have drafted a claim that would have literally captured the equivalent to the IGV limitation. (*See, e.g.*, Garner Dep. at 168-70)¹

26. On April 26, 1983, application claims 17 and 35 issued without further amendment as claims 8 and 19 of the ‘893 patent. (DX335)

¹ HSC does not believe that testimony from a patent lawyer expert is proper in the *Festo* analysis, and has moved *in limine* to preclude Mr. Garner’s testimony. HSC does not rely on Mr. Garner’s testimony alone to establish any of its proposed findings of fact or conclusions of law, and will use Mr. Garner’s testimony only if HSC’s motion *in limine* is denied.

27. On January 31, 1984, application claim 51 issued without further amendment as claim 4 of the '194 patent. (DX 337)

28. The "inlet guide vane limitation" (or "IGV limitation") is element 8(f) and 19(g) of the '893 patent and element 4(d) of the '194 patent. *Honeywell*, 370 F.3d at 1137 n.2.

29. As the Federal Circuit stated, "'inlet guide vane limitation' ... refers to both the claimed structure of the inlet guide vanes and their claimed function in the surge control system." *Honeywell*, 370 F.3d at 1137 n.2.

30. A comparison of issued claim 4 of the '194 patent to application claim 48 shows that the only difference is the addition of the IGV limitation (4(d)) and introductory claim language in the preamble relating to that limitation. (DX 338 at HSB 401573; DX 337 at Col. 10:64-12:16)

31. The IGV limitation set forth in the originally-dependent claims was the basis for allowance of asserted claims 4, 8 and 19, and Honeywell narrowed the scope of its original independent claims (which did not include the IGV Limitation) by canceling those claims and rewriting into independent form the dependent claims that included the IGV limitation. *Honeywell*, 370 F.3d at 1144. (DX 336 at HSB 401466, 472; DX 338 at HSB 401573-74)

32. Along with the claims including the IGV limitation, the examiner also allowed claims 1, 6, 17 and 18 of the '893 patent. Each of these other claims includes an additional limitation not at issue in the asserted claims, concerning a feature that responds, when the measured value of the flow parameter falls far below the set point, by disconnecting or interrupting the integral control signal. (DX 336 at HSB 401458, 401462-73)

IV. The APS 3200 Surge Control System

33. The APS 3200 APU is a gas turbine engine auxiliary power unit (“APU”) manufactured, used, sold and offered for sale by HSC. (Stipulation of Uncontested Facts ¶8)

34. The APS 3200 surge control system used a parameter known as “DELPQP.” DELPQP is simply short-hand for or “one form” of what is more commonly known as $\Delta P/P$, or DELTA-P-OVER-P. “DELP” is short for “DELTA P,” “Q” stands for quotient (or mathematically, “over”), and “P” is of course pressure. (Suttie Decl. ¶3, PX 1018; Muller Dep. at 69-70 (DELPQP is “one form” of $\Delta P/P$); Clark Decl. ¶11, DX 350 (APS 3200 parameter is “commonly expressed as $\Delta P/P$ ”))

35. The $\Delta P/P$ parameter in the APS 3200 was based upon static pressure measurements taken in the diffuser (near the diffuser throat) and the exit of the scroll. (Suttie Decl. ¶3, PX 1018; DX 167 at HSA 96898-99, 96920-23)

36. The APS 3200 surge control system encounters what is known as the inverted-V or “double solution” curve at supersonic flow, upon the onset of choked flow. At subsonic flows, the value of the $\Delta P/P$ parameter in the APS 3200 initially rises as flow through the compressor increases. By contrast, at supersonic flow levels, the value of the $\Delta P/P$ parameter in the APS 3200 decreases as the flow rate increases. As a result, there is a double-solution for the $\Delta P/P$ parameter in the APS 3200: a low value of the $\Delta P/P$ parameter may correspond to either low flow levels or high flow levels. ((Suttie Decl. ¶11, PX 1018); *see also Honeywell*, 370 F.3d at 1136 n.1)

37. The APS 3200 addressed this double solution behavior by overriding the surge control system to ensure that the surge valve remains closed to the exhaust (*i.e.*, does not bleed air to the exhaust) when it is determined that the $\Delta P/P$ measurement was obtained after

supersonic flow occurred. The determination of whether to override the surge control system in this way is based in part on IGV position. IGV position is not used to vary the setpoint of the control. (Suttie Decl. ¶¶12-13, 15 PX 1018; *see also Honeywell*, 370 F.3d at 1136)

38. HSC determined that IGV position should be used to address the double-solution behavior within two months of seeing the double solution issue. In an October 1, 1991 memo, one of HSC's engineers, Pete Suttie asked for views on the "double solution" curves contained in the test data. (DX 128) The next month, on November 28, 1991, another engineer sent a memo that proposed addressing this problem using a test that was based upon "IGV setting angle," or IGV position. This test was referred to as the B-Factor test. (DX 130)

39. HSC later replaced the B-Factor test with the pressure ratio test, which also relied on IGV position. (DX 154; DX 164)

40. Both the B-Factor test and the pressure ratio test used IGV position as an input. (DX 133; DX 142; DX 149; DX 151; DX 153, DX 164; DX 165; DX 154; DX 163)

41. HSC replaced the B-factor test because it did not "allow for inaccuracies in the sensors," in particular the Load Compressor Discharge Temperature sensor; not because of any issue concerning the use of IGV position as an input into addressing the double-solution issue. (DX 154)

V. Honeywell's Description Of The Equivalent At Trial

42. On August 4, 2000, HSC moved for summary judgment of non-infringement. (D.I. 104) HSC contended that it did not infringe under the doctrine of equivalents because in the APS 3200, "the set point is not adjusted as a function of inlet guide vane" (as required by the IGV limitation) but instead IGV position was used as "one sub-test of the high flow test" in

determining which side of the “double solution” curve the system was operating on. (*Id.* at 28, 32)

43. In response, Honeywell stated that the “double solution” curve had “nothing to do” with the question of infringement and was “irrelevant.” (Hon. Opp. Br. at 22-23, DX 351; Muller Decl. ¶34, DX 349; Clark Declaration ¶10, DX 350; *see also* DX 351 at 17-18; DX 349 at ¶33)

44. Based on Honeywell’s arguments and submissions, this Court denied HSC’s motion for summary judgment. *Honeywell*, 2001 U.S. Dist. LEXIS 2155, at *20.

45. At trial, Honeywell based its infringement case almost exclusively on the testimony of its technical expert, Gerard Muller. (Trial Tr. at 557-696, DX 353)

46. Mr. Muller attempted to demonstrate that the APS 3200 satisfied the IGV limitation of the asserted claims under the doctrine of equivalents using the function/way /result test. In particular, Mr. Muller asserted that the function of the IGV limitation is to “identify a guide vane position in order to help in the control of the surge control system,” and that the “result” of that limitation is that IGV position is “used in the operation of the surge control system.” (Trial Tr. at 669-70, 690, DX 353; *see also Id.* at 668, 690-94)

47. Mr. Muller testified that the APS 3200 met this test because it used IGV position as “a factor in controlling the surge bleed valve,” and that “as the IGV position changes, it changes the flow.” (Trial Tr. at 690, 709, DX 353)

48. At trial, Mr. Muller briefly mentioned the fact that DELPQP measures static pressure in the diffuser, but then stated that was “as much as I’m going to discuss it, because it’s not germane to what is occurring here, basically, it’s a part of the compressor, and it’s a location where Sundstrand measures pressure.” (Trial Tr. at 626, DX 353)

49. During closing arguments, Honeywell's lead trial counsel argued that the APS 3200 infringed under the doctrine of equivalents because the "flow-related parameter and the surge set point are functions and related to the inlet guide vane position and that "Delta P over P or DELPQP is related to inlet guide vane position." (Trial Tr. at 2549, 2554, DX 353)

50. Following the jury verdict of infringement under the doctrine of equivalents, HSC moved for judgment as a matter of law, asserting, among other things, that Honeywell had not met its burden of establishing infringement under the doctrine of equivalents. (D.I. 270)

51. The Court denied that motion, finding that Honeywell had carried its burden because it had presented sufficient evidence from which the jury could have concluded that "the flow-related parameter used by the APS 3200, DELPQP, was a direct function of inlet guide vane position." *Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.*, 166 F. Supp. 2d 1008, 1021 (D. Del. 2001).

52. On appeal, Honeywell argued that it had presented sufficient evidence to support the jury verdict of infringement under the doctrine of equivalents because it had showed that the APS 3200 "incorporate[s] the position of the [IGVs] into the surge control system, and that the APS 3200 uses IGV position to "efficiently control surge." (HWL Reply Br. at 23, DX 358)

53. In its *en banc* opinion vacating the jury verdict and remanding the case to determine if Honeywell could overcome the *Festo* presumption, the Federal Circuit referred to the equivalent to the IGV limitation as "to incorporate the position of the [IGVs] into the surge control system" of an APU. *Honeywell*, 370 F.3d at 1136 (citations omitted).

VI. Prior Art

54. Numerous prior art references prior to 1982 show the use of IGV position to affect a flow-related parameter in a surge control system. *See, e.g.*, Glennon, DX 327, col. 5, l.

33-40 (use in a surge control system of a “signal representative of the shift to summer 36 by an inlet guide vane.”); Warnock 1976, DX 305 at 11; White 1972, DX 309 at 60.

55. Several prior art references prior to 1982 show measuring static pressure in a diffuser. For instance, U.S. Patent No. 3,047,210, issued in 1962 to Best and cited in the prosecution history of Honeywell’s patents in suit, disclosed measuring “the difference between entrance and exit pressures of a diffuser section” and calling “this pressure difference ΔP .” (DX 317, col. 2:45-50) The Best patent explained that “two static taps located at spaced points in the diffuser section of the compressor could be used.” (*Id.* col. 8:7-10; *see also, e.g.,* Welliver & Acrurio 1967, DX 308 at 222-40 (“static pressure variation in diffuser”); Runstadler & Dean 1969, DX 289 at 402 (“static pressure holes ... located opposite the centerline of the diffuser passage”); Dean, Wright & Runstadler 1970, DX 229 at Fig. 26 (multiple static pressure taps in diffuser); Copp 1971, DX 227 at 4 (sixty static pressure measurements in diffuser))

56. Honeywell corporate representative Mr. Clark admitted that it was “general knowledge” dating back to at least 1976 that “if you’re going to [*sic* – measure] pressure in the diffuser, you’re going to want to measure static pressure.” (Clark Dep. at 97)

57. Honeywell’s technical expert Mr. Muller admitted that he has seen published reports prior to 1982 “indicating the measurement of static pressure within diffusers.” (Muller Dep. at 130-31)

VII. The L1011 APU

58. Hamilton Standard developed the load compressor and surge control system used on the APU for the Lockheed L1011 airplane in the late 1960’s and early 1970’s. (*e.g.* Brown Dep. at 22-23)

59. The L1011 first entered service in 1972 with Eastern Airlines, and was produced through 1983. (DX 376; DX 377; DX 378)

60. The surge control system for the L1011 load compressor used a flow-related parameter based upon measurements of static pressure in the diffuser. One sensor was near the diffuser throat and the other was near the diffuser exit. (DX 105 at SUND 499; Muller Dep. at 264-68)

61. Documents concerning the L1011 surge control system demonstrate that it encountered the double solution problem at supersonic flows. For instance, a 1975 memo investigating a potential change in the L1011 surge control system referred to the double-solution behavior as “undesirable tendency of both the signal curve and the ΔP curve to peak and then drop off thus potentially giving an ambiguous signal was still a problem.” (DX 108 at SUND 677) Another 1975 memo contained a figure showing a double solution curve in a graph of $\Delta P/P$ versus flow. (DX 104 at SUND 294)

62. Further, the Master Key reference for the APU on the L1011 states:

The load compressor housing diffuser forms a venturi chamber which has four pressure pickoffs; P_{S0} , P_{S1} , P_{S2} , and P_T . The venturi chamber is a divergent duct to subsonic flows and there is a progressive pressure rise from P_{S0} to P_T . If the flow becomes supersonic the venturi chamber acts as a convergent duct and there is a progressive pressure loss from P_{S0} to P_T .

(DX 105 at SUND 499). Thus, the Master Key explained why the L1011 experienced a double-solution: because the relation between pressure rise (or loss) and flow that applies at subsonic flow – a progressive pressure rise – inverts at supersonic flow, becoming a progressive pressure loss.

63. Numerous other prior art documents describe a double-solution or inverted-V curve. (Deych & Zaryankin 1970, DX 231 at Fig. 4.5; Dean, Wright and Runstadler 1970, DX 229 at Figs. 178, 179; Baghdadi 1977, DX 217 at Fig. 12)

64. The L1011 load compressor used a shock switch that “overrides the surge control driving the surge valve toward full closed” when supersonic flow, and thus the double solution problem, is sensed. (DX 105 at SUND 505)

VIII. Honeywell’s APUs

65. Several of Honeywell’s APU’s – including the 331-350 – have the same type of “inverted-V/double solution” as encountered by the APS 3200 APU. (Clark Decl. ¶10, DX 350)

66. In December 1983, Honeywell wrote a memo about a surge control system it had designed that used $\Delta P/P$ based upon measurements of static pressures in the diffuser. (Clark Dep. at 340-41; DX 202)

67. Honeywell corporate representative Jim Clark testified that in 1982 it didn’t “require any new technology” to use a $\Delta P/P$ parameter based upon measuring static pressure in the diffuser. (Clark Dep. at 359)

68. The surge control system in Honeywell’s 331-350 APU (developed for the A330 airplane in the late 1980’s) used a $\Delta P/P$ parameter that used measurements of static pressure in the diffuser. (*E.g.*, Clark Dep. at 135; DX 208 at AS 51696; DX 210; DX 214; DX 384)

69. Honeywell’s 331-350 APU experienced the double solution problem. (*E.g.*, Clark Dep. at 383-84; *see* DX 209; DX 210; DX 214; Muller Dep. at 254, 256-59)

70. Honeywell’s corporate representative Jim Clark testified that one will encounter the double solution problem “any time that you take a static pressure measurement in the context

of a flow parameter within the diffuser that experiences supersonic flow.” (Clark Dep. at 126-27, 135)

71. Honeywell’s 331-350 addresses the double solution problem by using a “flow sensor switching schedule” that “allows the logic to distinguish which side of the flow sensor curve it is operating on” and “keep[] the surge valve closed” at high flows. (DX 214 at RMD 483)

72. This schedule in the 331-350 surge control system “looks at inlet guide vane position in order to recognize whether you’re experiencing the double solution problem,” and “make[] a decision on which side of the [double solution] curve you’re on.” (Clark Dep. at 131, 134)

73. “The 331-350 APU used inlet guide vane position as an input in determining when you’re on the right-hand side of the double solution curve.” (Clark Dep. at 383-84)

74. Honeywell’s corporate representative admitted that had the double-solution problem encountered by the 331-350 come up in the 1970’s, Honeywell would have used the same solution using IGV position. (Clark Dep. at 162)

CONCLUSIONS OF LAW

I. The *Festo* Presumption Of Prosecution History Estoppel

75. Under the Federal Circuit’s holding, Honeywell is presumed to have surrendered all equivalents to the IGV limitation. The Federal Circuit held:

In this case there is a presumptive surrender of all equivalents to the inlet guide vane limitation. The only independent claims asserted in this case, claims 4, 8 and 19, were originally dependent on independent application claims 16, 32, 48 and 49, which did not include the inlet guide vane limitation. Claims 4, 8 and 19 included the inlet guide vane limitation. Claims 4, 8 and 19 were rewritten into independent form, and the original independent claims were cancelled, effectively adding the inlet guide vane limitation to the

claimed invention. Honeywell is presumptively estopped from recapturing equivalents to the inlet guide vane limitation.

Honeywell, 370 F.3d at 1144.

76. This legal determination by the Federal Circuit governs this remand. *Honeywell*, 370 F.3d at 1144.

77. The Federal Circuit's decision in *Honeywell* "does not create a 'new' form of estoppel," but instead applied "*Festo's* fundamental teaching – that a patent applicant's surrender of subject matter to obtain a patent presumptively gives rise to estoppel...." The decision "rests on longstanding patent principles" and does not "upset the reasonable expectations of patent holders or otherwise disrupt the patent system." Brief for the United States as Amicus Curiae, *Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.*, No. 04-293 at 8, 17.

78. The sole issue on remand is whether Honeywell can overcome the presumption set forth in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002), that it surrendered all equivalents to the inlet guide vane limitations when it narrowed its patent claims through amendment in order to gain allowance. *Honeywell*, 370 F.3d at 1144.

79. A patentee can overcome the presumption by showing that: (a) "the alleged equivalent would have been unforeseeable at the time of the narrowing amendment"; (b) "the rationale underlying the narrowing amendment bore no more than a tangential relation to the equivalent in question"; or (c) there was "some other reason" suggesting that Honeywell "could not reasonably be expected to have described the alleged equivalent." *Festo*, 344 F.3d at 1359.

80. Whether Honeywell can overcome the presumption of prosecution history estoppel is a question of law to be decided by the Court. *Festo*, 344 F.3d at 1367-68; *Biagro Western Sales, Inc. v. Grow More, Inc.*, 423 F.3d 1296, 1301-02 (Fed. Cir. 2005).

81. This Court did not previously issue findings of fact in its denial of HSC's motion for summary judgment. *See* Fed. R. Civ. P. 52(a) ("Findings of fact and conclusions of law are unnecessary on decisions of motions under Rule 12 or Rule 56...."); *Porter v. Farmers Supply Service, Inc.*, 617 F. Supp. 1175, 1180 (D. Del. 1985) (Court does not make disputed factual findings on motion for summary judgment).

82. The overarching question raised by *Festo* is whether "at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." *Festo*, 535 U.S. at 741.

83. In 1982 Honeywell could have drafted a claim that would have literally covered the alleged equivalent to the IGV limitation. (Garner Dep. at 168-70)

84. Whether the Patent Office would have allowed the broader alternative claim that Honeywell could have drafted is irrelevant. *See SmithKline Beecham Corp. v. Excel Pharms., Inc.*, 214 F. Supp. 2d 581, 592 n.23 (E.D. Va. 2002), *reversed on other grounds*, 356 F.3d 1357 (Fed. Cir. 2004) (recognizing that "whether the examiner would have accepted the hypothetical amendments" is not relevant to whether the patentee had the scientific ability to draft claims that would encompass the alleged equivalent); *Amgen*, 287 F. Supp. 2d at 149 (recognizing that "any argument that [the alternative intermediate claim language] would not have been successful in avoiding a [patentability] objection is irrelevant to whether the equivalent was foreseeable and within the patentee's ability to be included in the amendment")

II. The Alleged Equivalent In The APS 3200

85. In order to determine whether Honeywell can overcome the presumption that it surrendered all equivalents to the inlet guide vane limitation when it amended its claims in order

to gain allowance, the Court must first “identify that ‘equivalent.’” *Engineered Products Co. v. Donaldson Co., Inc.*, 313 F. Supp. 2d 951, 971 (N.D. Iowa 2004).

86. Honeywell may not seek to characterize the equivalent on remand in a different way than what they successfully argued was the equivalent in the February 2001 jury trial. *Tracinda Corp. v. DaimlerChrysler AG (In re DaimlerChrysler AG Sec. Litig.)*, 294 F. Supp. 2d 616, 628 (D. Del. 2003) (“Under the doctrine of judicial estoppel, a party may not maintain a position in a legal proceeding that is inconsistent with the position taken by that party in a previous proceeding.”).

87. The equivalent to the inlet guide vane limitation, based on the evidence Honeywell introduced and the arguments it made at trial in order to obtain a jury finding of infringement, was the use of a flow-related parameter that was a direct function of inlet guide vane position in the surge control system. *See, e.g., Honeywell Int’l Inc. v. Hamilton Sundstrand Corp.*, 166 F. Supp. 2d 1008, 1021 (D. Del. 2001) (equivalent because “the flow-related parameter used by the APS 3200, DELPQP, was a direct function of inlet guide vane position”); *Honeywell*, 370 F.3d at 1136 (equivalent is “to incorporate the position of the [inlet guide vanes] into the surge control system”).

III. Tangential Relation

88. To overcome the *Festo* presumption by relying on the “tangential relation” criterion, Honeywell must demonstrate that the reason for the narrowing amendment bore no more than a tangential, or peripheral, relation to the asserted equivalent. *Festo*, 344 F.3d at 1369.

89. Whether Honeywell can establish a merely tangential reason for its narrowing amendment is for the Court to determine from the prosecution history “without the introduction

of additional evidence, except, when necessary, testimony from those skilled in the art as to the interpretation of that record.” *Festo*, 344 F.3d at 1369-70.

90. In each of the asserted claims of the ‘893 and ‘194 patents, as the Federal Circuit held, Honeywell relied on the inlet guide vane limitation to define the claim over the prior art and gain allowance by canceling original independent claims that lacked the inlet guide vane limitation and replacing them with formerly-dependent claims that “effectively add[ed] the inlet guide vane limitation to the claimed invention.” *Honeywell*, 370 F.3d at 1141. (DX 336 at HSB 401466, 472; DX 338 at HSB 401573)

91. After the original claims that lacked the inlet guide vane limitation (application claims 16, 32 and 49) were rejected, Honeywell relied on the inlet guide vane limitation – which specifies adjusting the set point (the desired value of flow needed to avoid surge) based on inlet guide vane position – to distinguish the prior art and gain allowance. (DX 336 at HSB 401466, 472; DX 338 at HSB 401573)

92. The jury in the February 2001 trial found that the APS 3200 infringed the asserted claims of the ‘194 and ‘893 patents under the doctrine of equivalents. Honeywell had asserted that the IGV limitation was infringed by equivalence. (DX 354)

93. As a matter of law, Honeywell’s “rationale” underlying its narrowing amendments to application claims 16, 32 and 49 was directly related (and not merely tangential) to the asserted equivalent. *Festo*, 344 F.3d at 1373; *see also Biagro Western Sales, Inc. v. Grow More, Inc.*, 423 F.3d 1296 (Fed. Cir. 2005); *Rhodia Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1383 (Fed. Cir. 2005); *eSpeed, Inc. v. BrokerTec USA, L.L.C.*, 342 F. Supp. 2d 244 (D. Del. 2004).

94. Under *Festo*, a patentee cannot establish tangentiality merely by asserting that the equivalent is not in the prior art the examiner cited. *Festo*, 344 F.3d at 1373 (finding more than a tangential relationship between the asserted equivalent and the reason for the amendment despite the fact that (with respect to the Stoll patent) the “sealing ring” amendment at issue “was made to distinguish two prior art patents *that did not disclose sealing rings*”) (emphasis added); *Rhodia Chimie v. PPG Industries Inc.*, 402 F.3d 1371, 1383 (Fed. Cir. 2005) (“As we have stated, ‘an amendment made to avoid prior art that contains the equivalent in question is not tangential,’ *It does not follow, however, that equivalents not within the prior art must be tangential to the amendment.*”) (emphasis added; citations omitted).

95. Honeywell bears the burden of establishing tangentiality by pointing to affirmative statements in the prosecution history that demonstrate that the reason for the amendments was unrelated to the equivalent. *Festo*, 344 F.3d at 1369 and 1372.

96. Honeywell cannot establish tangentiality by relying on its own silence or failure during prosecution to explain the reason for the amendments. *Festo*, 344 F.3d at 1369 and 1372; *Biagro*, 423 F.3d at 1306.

97. “Under *Festo*, any doubts about the reason for the amendment are resolved against the applicant during a later litigation.” Melvin Garner, *Prosecution of Patent Applications*, FUNDAMENTALS OF PATENT PROSECUTION, at 27 (2005).

98. Where “the prosecution history reveals no reason for the ... amendment, and [where the patentee] still identifies no such reason, [the patentee] has not shown that the rationale for the ... amendment was only tangential to the accused equivalent.” *Festo*, 344 F.3d at 1371-72.

99. Unexplained amendments cannot serve as a basis for overcoming the *Festo* presumption. *Biagro*, 423 F.3d at 1306; *Festo*, 344 F.3d at 1371-72. Thus, Honeywell's failure to affirmatively explain the rationale for its amendments during prosecution negates its ability to satisfy the tangential relation criterion.

100. The prosecution history of the patents-in-suit is silent as to the reason Honeywell amended its claims as it did. Honeywell provided no explanation whatsoever for its amendments or for including the IGV limitation. Honeywell simply accepted the examiner's invitation to rewrite its original claims to "effectively add[] the inlet guide vane limitation to the claimed invention." *Honeywell*, 370 F.3d at 1144. Honeywell did not and cannot give any reason for its IGV amendments other than they were necessary to overcome the prior art. *See Biagro*, 423 F.3d at 1306.

101. If Honeywell had not intended to surrender coverage of equivalents to its specific use of IGV position, it could have drafted claims of intermediate scope – covering something in between the original rejected independent claims and the issued claims – rather than claiming a specific use of IGV position as it did. (Garner Dep. at 168-70)

102. By accepting the IGV limitation and not pursuing either the original broad claims or claims of intermediate scope, Honeywell surrendered the scope of equivalents between the broad independent claims that were rejected and the narrow amended claims that were allowed and gave notice that the public was free to pursue alternative techniques that did not fall within the scope of the IGV limitation. *See Biagro*, 423 F.3d at 1306.

103. Honeywell's reliance on *Insituform Technologies, Inc. v. CAT Contracting, Inc.*, 385 F.3d 1360 (Fed. Cir. 2004), is misplaced. In *Insituform*, the patentee expressly stated to the patent examiner that the reason for its amendment related to only one of the limitations

incorporated from the four dependent application claims, and the asserted equivalent did not relate to that limitation. 385 F.3d at 1369-70. Here, Honeywell was *silent* as to the reason it amended its claim as it did to overcome the prior art, and the limitation it incorporated – the IGV limitation – was directly related to the alleged equivalent. (DX 336 at HSB 401473-78; DX 338 at HSB 401574)

104. The Federal Circuit in *Insituform* noted that in the prosecution history: “Insituform had *explained the reason* for the amendment” and had “*stated to the examiner*” that its claims were distinct from the prior art because the proximity of the vacuum tube to the resin source avoided the need for an exceedingly long suction compressor. 385 F.3d at 1369-70 (citations omitted; emphasis added). In other words, the prosecution history showed that the improvement on which Insituform relied to distinguish the prior art related to the proximity of the vacuum to the resin source – not the other limitations it added. Honeywell did not explain any reason for its amendments. (DX 336 at HSB 401473-78; DX 338 at HSB 401574)

105. Moreover, in *Insituform*, the patentee amended the asserted claim by incorporating four separate dependent claims into a rejected independent application claim. 385 F.3d at 1368-69. Here, Honeywell amended each of its asserted claims by incorporating a *single* previously dependent claim into the rejected independent application claim. (DX 336 at HSB 401466, 472; DX 338 at HSB 401573; *see also* 35 U.S.C. § 112 (dependent claims “specify a further limitation of the subject matter claimed”) (emphasis added))

106. In *Biagro*, the Federal Circuit similarly distinguished the facts of *Insituform*. The *Biagro* court noted that in *Insituform*, “the reason for the amendment and the alleged equivalent involved different aspects of the invention – the location of the vacuum source relative to the resin versus the number of vacuum cups.” 423 F.3d at 1306. In contrast, in *Biagro*, “the reason

for the amendment and the accused equivalent ... both relate to the concentration of the fertilizer.” *Id.* at 1307; *see also Freeman v. Playtex Prods.*, 388 F. Supp. 2d 1251, 1260 (D. Kan. 2005) (similarly distinguishing *Insituform*). This same distinction applies to this case.

107. Honeywell’s reliance on *Cordis Corp. v. Medtronic Avenue Inc.*, 336 F. Supp. 2d 363 (D. Del. 2004), is similarly misplaced. In *Cordis*, the Court concluded that the patentee had established a tangential relation between the reason for the amendment and the alleged equivalent, because the patentee affirmatively explained the rationale for its amendment. 336 F. Supp. 2d at 370 (stating that “[i]n addressing Ersek, Cordis focused on the double thickness of the bridge portions of Ersek’s walls”) (citations omitted). Again, here Honeywell was *silent* as to the reason it amended its claim as it did to overcome the prior art. (DX 336 at HSB 401473-78; DX 338 at HSB 401574)

108. Honeywell’s citation to *Talbert Fuel Sys. Patents Co. v. Unocal Corp.*, 347 F.3d 1355 (Fed. Cir. 2003), is also unpersuasive. *Talbert* merely held that because the asserted equivalent was found in the prior art, it bore a direct relationship (that is, not a tangential relationship) to the narrowing amendment. 347 F.3d at 1360. The Federal Circuit rejected the corollary to that proposition that Honeywell attempts to argue. *Rhodia Chimie v. PPG Industries Inc.*, 402 F.3d 1371, 1383 (Fed. Cir. 2005) (“As we have stated, ‘an amendment made to avoid prior art that contains the equivalent in question is not tangential,’ *It does not follow, however, that equivalents not within the prior art must be tangential to the amendment.*”) (emphasis added; citations omitted)

109. All of the language Honeywell added to each of the original independent claims to gain allowance came from a single corresponding dependent claim consisting of a single limitation. (DX 336 at HSB 401466-472; DX 338 at HSB 401573)

110. As to issued claim 4 of the '194 patent, the only difference between the issued claim and original application claim 48 was the addition of element 4(d) in the issued claim that represents IGV limitation and text in the preamble relating to that limitation. (DX 338 at HSB 401573; DX 337 at Col. 10:64-12:16)

111. The Federal Circuit properly treated the IGV limitation as a single limitation and the only amendment to the asserted claims. As the Federal Circuit explained, "Claims 4, 8 and 19 were rewritten into independent form, and the original independent claims were cancelled, effectively adding the inlet guide vane limitation to the claimed invention." *Honeywell*, 370 F.3d at 1144.

112. In any event, even if the amendments in the prosecution history were viewed as adding several limitations, Honeywell cannot prevail on the tangential relation criterion because it failed to explain *any* reason for its amendment, much less clearly explain that the reason was unrelated to the use of IGV position. *Festo*, 344 F.3d at 1369 and 1372; *Biagro*, 423 F.3d at 1306; (DX 336 at HSB 401473-78; DX 338 at HSB 401574)

113. That the examiner allowed certain claims (claims 1, 6, 17 and 18 of the '893 patent) which did not describe the IGV limitation is irrelevant. Those claims include a limitation not at issue in the asserted claims – concerning a feature that responds, when the measured value of the flow parameter falls far below the set point, by disconnecting or interrupting the integral control signal. The fact that the examiner allowed these claims, with some other differentiating feature, has no relevance to the application of estoppel to the asserted claims. In each of the asserted claims, as the Federal Circuit has held, Honeywell relied on the IGV Limitation to define over the prior art and gain allowance by canceling original independent claims that lacked

the IGV Limitation and replacing them with formerly-dependent claims that added the IGV Limitation. *Honeywell*, 370 F.3d at 1144.

114. Honeywell has not met its burden of establishing that the rationale underlying the narrowing amendment it made to asserted claims of the ‘194 and ‘893 patents bore “no more than a tangential relation” to the equivalent to the inlet guide vane limitation.

IV. Unforeseeability

115. The unforeseeability “criterion presents an objective inquiry, asking whether the alleged equivalent would have been unforeseeable to one of ordinary skill in the art at the time of the amendment.”” *Festo*, 344 F. 3d at 1369 (“[O]bjective unforeseeability depends on underlying factual issues relating to, for example, the state of the art and the understanding of a hypothetical person of ordinary skill in the art at the time of the amendment.”). That person is “presumed to be aware of all the pertinent prior art.” *Custom Accessories, Inc. v. Jeffrey-Allan Industries, Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986); see *Orthopedic Equipment Co. v. United States*, 702 F.2d 1005, 1012 (Fed. Cir. 1983) (“The person of ordinary skill in the art ... is presumed to have before him all of the relevant prior art.”).

116. “[L]ater-developed technology (e.g., transistors in relation to vacuum tubes, or Velcro® in relation to fasteners),” is usually not foreseeable, while “old technology” would “more likely have been foreseeable.” *Festo*, 344 F.3d at 1369.

117. The inquiry is whether the equivalent is based upon later-developed technology, not a later-developed product. The fact that HSC did not begin developing the accused product until 1989 does not mean that the relevant technology embodied in that product was “later-developed.” *Festo*, 344 F.3d at 1369.

118. The unforeseeability criterion looks at the equivalent to the particular claim limitation at issue. *Honeywell*, 370 F.3d 1131, 1144 (Fed. Cir. 2004) (en banc) (“The scope of the patentee’s concession is determined on a limitation-by-limitation basis.”); *Intex Recreation Corp. v. Metalast, S.A.*, 400 F. Supp. 2d 123 (D.D.C. 2005) (“equivalence must be assessed ‘on a limitation-by-limitation basis as opposed to from the perspective of the invention as a whole’”) (citation omitted).

119. “[I]n determining whether an alleged equivalent would have been unforeseeable, a district court may hear expert testimony and consider other extrinsic evidence relating to the relevant factual inquiries.” *Festo*, 344 F.3d at 1369.

120. The determination of the unforeseeability of the technology is based upon the state of the prior art, and not limited to the intrinsic record or references cited in the prosecution of the patents. *Festo*, 344 F.3d at 1369; *Glaxo Wellcome, Inc. v. Impax Laboratories, Inc.*, 356 F.3d 1348, 1355-56 (Fed. Cir. 2004); *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 75 U.S.P.Q.2d 1830 (D. Mass. 2005).

121. “[T]he time when the narrowing amendment was made” is “the relevant time for evaluating unforeseeability, for that is when the patentee presumptively surrendered the subject matter in question.” *Festo*, 344 F.3d at 1365 n.2.

122. “[I]f the alleged equivalent were known in the prior art in the field of the invention, it certainly should have been foreseeable at the time of the amendment.” *Pioneer Magnetics, Inc. v. Micro Linear Corp.*, 330 F.3d 1352, 1357 (Fed. Cir. 2003).

123. The fact that a technology “had not yet been used for the purpose claimed does not make it unforeseeable.” *Bio-Rad Laboratories, Inc. v. Applera Corp.*, No. C02-05946JW, 2005 WL 2008020 at, *6 (N.D. Cal., Aug. 12, 2005).

124. Minor differences between the equivalent and the prior art do not render the equivalent unforeseeable. *See Competitive Technologies Inc. v. Fujitsu Ltd.*, 333 F. Supp. 2d 858, 887 (N.D. Cal. 2004) (“The discovery of a time period in which the energy losses resulting from early clamping are not as large as the energy losses would be in other time periods simply is not the kind of new technology that makes an equivalent unforeseeable.”); *Bio-Rad Laboratories*, 2005 WL 2008020, at *6 (“the fact that a chemical is difficult to manufacture or had not yet been used for the purpose claimed does not make it unforeseeable.”).

125. It was known and foreseeable in 1982 to use IGV position to affect a flow-related parameter in a surge control system. (*E.g.*, Muller Dep. 46; Clark Dep. at 250; Japikse Trial Testimony; Glennon, DX 327, col. 5, l. 33-40; Warnock 1976, DX 305 at 11; White 1972, DX 309 at 60)

126. The use of a $\Delta P/P$ parameter, such as the one found in the APS 3200 surge control system, was known and foreseeable in 1982. (*E.g.*, Muller Dep. at 68; Japikse Trial Testimony; DX 105; DX 227; DX 229; DX289; DX 308; DX 317; DX 384)

127. It was known and foreseeable in 1982 to use a $\Delta P/P$ parameter based upon measurements of static pressure in the diffuser. (*E.g.*, L1011 APU Diffuser, DX 399; U.S. Patent No. 3,047,210 to Best, DX 317; Welliver & Acrurio 1967, DX 308 at 222-40; Runstadler & Dean 1969, DX 289 at 1402; Dean, Wright and Runstadler 1970, DX 229 at Fig. 26; Copp 1971, DX 227 at 4; Japikse Trial Testimony; Clark Dep. at 97-99, 340-41, 359; DX 202)

128. The L1011 and the APS 3200 use similar techniques for measuring flow, by measuring changes in the pressure in the diffuser. (L1011 APU Diffuser, DX 399; DX 105 at SUND 492, 499)

129. The inverted-V or double solution curve resulting from supersonic flow was known and foreseeable in 1982. (L1011 APU, DX 399; Honeywell's 331-350 APU (developed just after the amendment date); Deych & Zaryankin 1970, DX 231 at Fig. 4.5; Dean, Wright and Runstadler 1970, DX 229 at Figs. 178, 179; Baghdadi 1977, DX 217 at Fig. 12; Japikse Trial Testimony; Clark Dep. at 114-18, 127, 131-35, 162; 383-84)

130. Both the APS 3200 and the L1011 encountered the double-solution problem at supersonic flow levels. The APS 3200 and the L1011 deal with the double-solution problem in the same way: they simply detect when supersonic flows have been reached and then override the surge control system to keep the surge valve closed. (DX 108 at 5; DX 104 at SUND 294; DX 105 at 2-4, 2-12; Suttie Decl. at ¶11, PX 1018)

131. The use of IGV position to address the inverted-V or double solution curve was foreseeable in 1982. (*E.g.*, Japikse Trial Testimony; Clark Dep. at 114-18, 127, 131-35, 162; 383-84)

132. Honeywell encountered the same double-solution problem as the APS 3200 and solved it in the same way as the APS 3200, using inlet guide vane position. And Honeywell's corporate representative admitted that if the double-solution problem had arisen in the 1970s, as it did in the L1011 APU, Honeywell would have solved the problem using inlet guide vane position at that time, just as it later did with the 331-350 APU. (Clark Dep. at 162)

133. The APS 3200 APU did not utilize later-developed technology that would render the equivalent to the IGV limitation unforeseeable in 1982. (*e.g.*, Clark Dep. at 358-59; Garner Dep. at 168-70)

134. The fact that HSC determined within two months of observing the double-solution curve that IGV position should be used to address that behavior supports HSC's contention that the equivalent to the IGV limitation was foreseeable in 1982. (DX 128; DX 130)

135. The testimony by HSC's expert Mr. Shinskey in his expert report and at trial about certain features of the APS 3200 being "unique" is irrelevant, since the jury necessarily rejected Mr. Shinskey's testimony in determining that the APS 3200 infringed the asserted claims. In fact, Honeywell argued to this Court that HSC's defense to infringement "lacked all credibility" and was based upon a "series of outright misstatements of fact" by Mr. Shinskey. (DX 355 at 10)

136. Mr. Shinskey's testimony about the DELPQP parameter was based upon "the author's experience." (Shinskey Report at 9, cited at Hon. Br. 23) By contrast, the foreseeability inquiry is based upon a hypothetical person of ordinary skill in the art, who is presumed to know all of the prior art. *Custom Accessories, Inc. v. Jeffrey-Allan Industries, Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986); see *Orthopedic Equipment Co. v. United States*, 702 F.2d 1005 (Fed. Cir. 1983) ("The person of ordinary skill in the art ... is presumed to have before him all of the relevant prior art.").

137. Honeywell's reliance on *BEI Tech., Inc. v. Matsushita Elec. Indus. Co.*, 268 F. Supp. 2d 782 (E.D. Mich. 2003), a district court opinion issued prior to the *Festo* en banc decision, is misplaced. In *BEI Tech.*, the court found that direct bonding of quartz wafers not foreseeable because it was "after-arising technology." *Id.* at 801-02. Here, by contrast, the equivalent at issue was based upon technology that existed prior to 1982.

138. In *BEI Tech.*, the court stated that it was basing its ruling of unforeseeability on an article describing "modern wafer bonding." The court listed a variety of arguments made by the

patentee, but did not state that it relied upon them at all, including: that “none of the prior art references raised during prosecution had suggested or disclosed the equivalent,” that “none of the inventors were personally aware of the equivalent; and that “the infringer had not developed the equivalent until several years after prosecution of the patent.” 268 F. Supp. 2d at 802.

139. For all of these reasons, Honeywell has failed to establish that the equivalent to the inlet guide vane limitation was unforeseeable at the time Honeywell amended its claims in 1982 and 1983.

V. Some Other Reason

140. The third way that a patentee may overcome the *Festo* presumption is to show that there is “some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question.” *Festo*, 535 U.S. at 740-41.

141. The “some other reason” test, “while vague, must be a narrow one; it is available in order not to totally foreclose a patentee from relying on reasons, other than unforeseeability and tangentialness, to show that it did not surrender the alleged equivalent.” *Festo*, 344 F.3d at 1370.

142. Like the tangential relation criterion, “when at all possible, determination of the third rebuttal criterion should also be limited to the prosecution history record.” *Festo*, 344 F.3d at 1370.

143. The only possible “other reason” that the Federal Circuit has recognized to date is the shortcoming of language preventing the patentee from describing the alleged equivalent when it narrowed the claim. *Festo*, 344 F.3d at 1370.

144. Honeywell does not argue that any shortcomings of language prevented it from describing the alleged equivalent to the IGV limitation when it narrowed its claim. In fact, its

proffered patent law expert conceded that Honeywell could have drafted a claim that would have literally covered the alleged equivalent. (Garner Dep. at 169-70)

145. Honeywell's argument that it can overcome the *Festo* presumption by arguing that "a reasonable patent practitioner in 1982-83 would not have believed that he had surrendered coverage of equivalents to inlet guide vane position use during prosecution" is not supported by any case law, and is contrary to Federal Circuit precedent. *Honeywell*, 370 F.3d at 1144; *Festo*, 344 F3d at 1370 n.4; *see also Festo*, 535 U.S. at 741 (stating that the "courts may presume the amended text was composed with awareness of this rule"); Brief for the United States as Amicus Curiae, *Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.*, No. 04-293 at 17 (Federal Circuit decision in *Festo* "does not create a 'new' form of estoppel," but instead applied "*Festo*'s fundamental teaching – that a patent applicant's surrender of subject matter to obtain a patent presumptively gives rise to estoppel....")

146. The Federal Circuit already held that Honeywell *did* make a narrowing amendment, and thus that there is a "presumptive surrender of all equivalents to the inlet guide vane limitation." *Honeywell*, 370 F.3d at 1144.

147. That a "reasonable patent attorney" might have thought the law was different in 1982 is not a reason by which Honeywell can avoid the *Festo* presumption. The Federal Circuit specifically held that the *Festo* presumption of surrender applies retroactively "to all granted patents and to all pending litigation that has not been concluded with a final judgment, including appeals," regardless of a patent lawyer's belief about the state of the patent law at the time of the amendment. *Festo*, 344 F3d at 1370 n.4; *see also* 535 U.S. at 741 (stating that the "courts may presume the amended text was composed with awareness of this rule").

148. Honeywell's argument that it can overcome the *Festo* presumption of surrender by arguing that "a reasonable person would have believed that the APS 3200 surge control system ... was literally covered by claim 4 of the '194 patent" is based upon a legal standard that the Federal Circuit has specifically rejected as not being a valid "other reason." *Biagro*, 423 F.3d 1307.

149. In *Biagro*, despite a finding that the claims did not literally cover the accused device, the patentee argued that its purported belief at the time of the amendment that the accused device literally infringed was "another reason" that prosecution history estoppel should not apply. 423 F.3d at 1307. Thus, the patentee argued – like Honeywell does here – that it had no reason to draft a broader claim and estoppel should not apply. *Id.* The Federal Circuit rejected this argument "as merely an attempt to reargue" the court's prior ruling against the patentee that had precluded literal infringement. *Id.*

150. Honeywell's reliance on *Amgen v. Hoechst*, 287 F. Supp. 2d 126 (D. Mass 2003) is unavailing. In *Amgen*, a district court decision issued before the Federal Circuit's decision in *Biagro*, after analyzing an "other reason" argument similar to Honeywell's, the court decided not to "rest its decision" on the "other reason" criterion because it deemed its analysis of that criterion was "less certain" and recognized that the Federal Circuit would likely "cabin in the ['other reason'] criterion." 287 F. Supp. 2d at 159. In addition, the facts of *Amgen* are plainly distinguishable from those presented here.

151. As noted, the Federal Circuit in *Biagro* did in fact reject the exact argument outlined in *Amgen*, and on which Honeywell now attempts to rely. *Biagro*, 423 F.3d at 1307.

152. For all of these reasons, Honeywell has not met its burden of establishing “some other reason” that it could not reasonably have been expected to have drafted a claim that would have captured the asserted equivalent when it amended its claims in order to gain allowance.

CONCLUSION

Honeywell has failed to rebut the Festo presumption that it surrendered all equivalents to the IGV limitations. Accordingly, Honeywell is barred by the doctrine of prosecution history estoppel from arguing that the APS 3200 infringes asserted claims 8 and 19 of the ‘893 patent and claim 4 of the ‘194 patent under the doctrine of equivalents. As a result, the Court enters judgment of non-infringement in favor of HSC.

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CERTIFICATE OF SERVICE

I hereby certify that on February 17, 2006, I electronically filed the foregoing document with the Clerk of Court using CM/ECF, which will send notification of such filing to Thomas C. Grimm and Julia Heaney.

I also certify that on February 17, 2006, I caused to be served true and correct copies of the foregoing document on the following in the manner indicated below:

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